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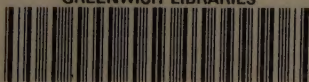
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# SWIMMING





JABEZ WOLFFE



THE  
TEXTBOOK  
OF  
SWIMMING

By JABEZ WOLFFE

*EIGHTH EDITION*

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# CONTENTS

| CHAPTER                                                                   | PAGE |
|---------------------------------------------------------------------------|------|
| I—SWIMMING FOR BEGINNERS .. .. .<br>( <i>The Breast Stroke—Floating</i> ) | 7    |
| II—BACK SWIMMING .. .. .                                                  | 20   |
| III—SIDE AND OVER-ARM STROKES .. .. .                                     | 24   |
| IV—THE “ TRUDGEN ” AND “ CRAWL ” STROKES                                  | 28   |
| V—DIVING .. .. .                                                          | 36   |
| VI—LONG PLUNGING .. .. .                                                  | 44   |
| VII—TRAINING .. .. .                                                      | 48   |
| VIII—CHANNEL AND LONG DISTANCE SWIMMING ..                                | 56   |
| IX—FANCY AND TRICK SWIMMING.. .. .                                        | 64   |
| X—LIFE-SAVING .. .. .                                                     | 68   |
| XI—WATER POLO .. .. .                                                     | 76   |
| WITH 30 ILLUSTRATIONS                                                     |      |





## PUBLISHER'S NOTE

THE number of Swimming Books already in existence led the author, on the first appearance of this manual, to express some doubt as to the advisability of issuing another. "But" he went on to say, "it will, I think, be generally admitted that Swimming cannot become too widely popularised, and I have fancied that certain non-swimmers might possibly be curious to learn my own views on the subject of my long-drawn-out war with that silver streak which protects the coasts of old England.

"These may very possibly not be interesting in themselves, but as a fair amount of public attention would appear to have been attracted thereto, several persons have expressed a desire to learn all about the causes and incidents of the quarrel.

"My formidable antagonist cannot speak—well, not on paper, at all events—so I have endeavoured to say something both for him and for myself. He is an awkward customer to tackle and will always retain my profound respect. I hope that I have succeeded in doing him justice in these pages, and shall be considerably gratified if my story tempts some of my readers to enter the lists as well. The Channel accepts all challengers—no one barred—thereby displaying a marked difference to several other champions.

"As my views and ideas about Swimming in general may, perhaps, prove of some slight interest and assistance, I have ventured to include them in this volume. They may be 'poor things,' but they are 'mine own.'"

That there was ample room for Mr. Wolffe's book is evident from the fact that it is now in its eighth edition and has helped thousands of would-be swimmers to become proficient.





# SWIMMING

## CHAPTER I

### Swimming for Beginners

THAT everybody ought to be able to swim is, I fancy, a statement which no one will dispute.

That everybody can learn to swim, without difficulty, is another which it is desirable should be equally widely known.

The first thing to learn is not to be afraid of the water. It isn't at all formidable really, and if you commence learning without going out of your depth, there isn't any risk either.

Get thoroughly acquainted with the fact that your body is lighter than water, and that if you don't struggle about wildly you will really find it more difficult to sink than to keep afloat.

It isn't a bad idea to start by learning to hold your breath under water. You can do this easily in your wash-hand basin at home. You are not afraid of drowning yourself in that, are you?

Very well. Now fill that receptacle with water, draw a deep breath, and plunge your head well in, holding your breath for as long as you can keep your face immersed. You find that you can do this for thirty seconds at least without inconvenience, so you can go down to the nearest bath, walk in to breast-depth and drop a penny to the bottom.

Stoop down and try and pick this up. You will have got over the smarting sensation during your bedroom practice, and so will be able to keep your eyes open, but you will find it entails an awful lot of exertion to reach down as far as that penny. Clear proof that drowning, due to sinking below the surface, isn't nearly so easy as it looks.

Once you are satisfied of this, you won't be so afraid of losing touch with the bottom of the bath.

I think I would recommend this as the best series of stages by which a naturally timid youngster could be broken of his initial fear. He will, by these means, find out for himself that there is little or no risk in learning to swim, and this self-acquired knowledge will impress him far more strongly than all the verbal wisdom you can shower on him, no matter how eloquently you shower it.

If, however, the novice still shows signs of nervousness, the instructor should accompany his pupil into the water and support him during his first strokes by holding him up with one hand under the stomach. This is a far better method than any of the cork belts or other artificial aids. These last impede freedom of movement, are apt to slip out of place (with dangerous consequences at times), and owing to the reliance which the beginner is encouraged to place on them, often encourage a cramped action once they are dispensed with, which it is very difficult to correct subsequently. Then the supporting hand, being there often more as a guarantee of good faith than as a real assistance, can be withdrawn without the novice becoming aware of its disappearance. He strikes out without it, and being informed he is getting along famously by





THE TOILET FOR A CHANNEL SWIM

himself, will gain such an access of confidence as to practically enable him to dispense with any more doses of that stimulant.

I suppose that every swimmer, or almost every swimmer, has to get through the water by means of the breast stroke. I shall have something to say about myself and my strokes in general later on, but for the time being will admit that this breast stroke *does* seem to be the most natural method of getting along, even if it is, at the same time, the slowest and, perhaps, the most tiring. Still, we must all learn to walk before we can run, and by swimming on the breast we can keep our heads always above the surface, thus avoiding any of the nervousness consequent on a novice ducking under when he least expects to do so.

### The Breast Stroke

For this last mentioned reason I should advise that beginners be first instructed in the use of their arms.

These limbs certainly play a very minor part in propelling the body through the water in any style of swimming, but, nevertheless, since it is chiefly by means of arm work that a beginner will keep his face out of the water, it is preferable to get him well practised therein before worrying overmuch about his legs. This method will also accustom him to swimming as near the surface as possible, and since air offers less resistance than water, it will be to his subsequent advantage, from the point of view of speed, to keep as much of his body out of the water as he can.

In making the breast stroke, therefore, the arms



THE BREAST STROKE. POSITION I

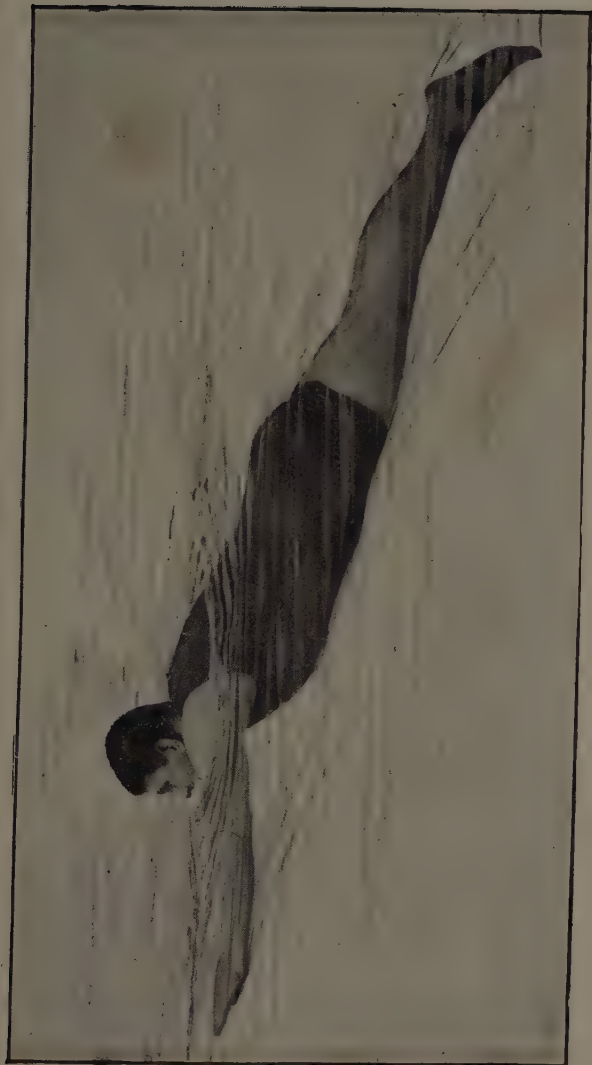
should first be drawn up, elbows close to the sides, hands just under the upper part of the chest, thumbs touching and fingers closed, the backs of the hands slightly arched.

Then, shooting the hands well forward to the full extent of the arms, sending the body after them, part the thumbs when the full stretch is reached, turn the hands almost back to back, and sweep them round till the elbows again touch the sides. The backward sweep should be as vigorous as possible, for reasons which I will deal with later, and should terminate when the outstretched hands are about horizontal with the shoulders, the elbows then being bent and the arms and hands returned to the first position.

The shooting forward of the body accompanying the forward reach of the hands will bring the legs up towards the surface, which they should not, however, be allowed to break. As they come towards the surface they should be drawn up with the heels touching, toes turned out right and left, knees wide apart, and soles of the feet just under the surface. As soon as they have assumed this position, strike out with them to the full stretch of the legs, giving a sort of leg twist as you do so, and the moment they become straight, bring them together preparatory to drawing them up as before.

The leg strokes work alternately with the arm strokes, that is to say, the legs are drawn up as the arms sweep round, and are kicked out as the arms shoot forward, thus maintaining a continual propulsion.

The strokes backward of both arms and legs should be made with the utmost vigour, exerting



THE BREAST STROKE. POSITION 2

your full force on the water, for these are the movements which will send you along. Conversely, the forward shoot of the arms and the drawing-up of the legs should be very gentle movements, just slipped through the water, as these movements tend to check your progress forward.

Another important point to get acquainted with is that it is not the *push* of your palms and the soles of your feet which send you along, but the volume of water (or water-wedge, if you prefer it), which is sent behind you. For this reason, the knees should be spread out as widely as possible, in order to increase the size of the wedge. The soles help a little in pushing you off from the wall of water behind you, but nothing near so much as does the volume which you fling backwards with your shins and the front of your feet. This is a point well worth studying, as I have seen beginners who had got hold of the idea that the soles of their feet alone did the trick, and who, in consequence, bent their knees out nearly at right angles to their bodies, and who hardly parted their heels at all at any position of the leg stroke, thus deriving little or no assistance from their leg action, which, as already mentioned, is the most important factor.

The gentlemen could never find out the reason for their slow progression until they tried to swim with their legs alone. They could get along all right with their arms only, and at about the same pace as they would when using their legs as well but when they dispensed with the arm action they could make no headway, and frequently went under, until they summoned up sufficient courage to confess their ignorance, and managed to convey some notions



FLOATING AND PADDLING ONESELF ALONG.



of their peculiar ideas concerning leg-strokes to more experienced swimmers.

It was difficult to understand, at first, how and why they should have ever dropped into the action, even if I understand now altogether clearly what that action was (it wasn't easy to grasp); but, anyway, as soon as the why and wherefore of the correct stroke was explained, they soon grasped it, and could only regret the time that had been wasted. So it has been in order to save my readers a similar waste of time that I have occupied so much space in explaining the theory of the stroke here.

### Floating

Floating is generally considered to be an item of the art of Swimming which it is unnecessary to acquire, unless the swimmer entertains an idea of taking up the "fancy or trick" part of the business, but I have always fancied that it might very advantageously be included in the beginner's course. First and foremost, because a knowledge of floating will greatly augment the confidence of any beginner; and, secondly, because he will so much the more readily adapt himself to swimming on his back.

Thirdly, if a thirdly be needed, it will enable the novice to take a rest when he wishes to do so, and thus encourage him the more readily to test his powers at long distance swimming, when time may not be so great an object as distance.

In order, therefore, to learn to float easily, stand upright in water up to your chest, say, or deeper; anyway, as deep as you can stand in conveniently, and stretch your arms out at right angles to your



THE BACK STROKE. POSITION I

shoulders. Now draw in a full deep breath, so that your lungs are inflated fully, lock your diaphragm muscle (as the operation is called), or, in other words, hold your breath. Then lower your body gradually backwards, at the same time bringing the arms slowly beyond the head as the legs rise to the surface. The feet should be close together, as should the hands, with the latter slightly above the surface. The head should be bent well forward and the gaze concentrated on the toes. The position once assumed, all motion should be suspended. The instructor's duties can be confined to giving the above directions and to placing one hand under the small of the back, so as to assist in obtaining the necessary balance and in removing any fear of sinking.

This back floating once thoroughly mastered, the swimmer can then begin to practise other methods of remaining motionless on the surface. These will not assist him in his knowledge of swimming, pure and simple, perhaps; but, at all events, it won't do harm to study them, and, as they will be necessary to learn before any attempt be made at "Fancy" Swimming, they may as well be dealt with in this chapter.

The next stage is chest floating, which is no very great advance on the back method just dealt with. Once you have mastered the art of resting motionless at full length on the surface of the water, turn over slowly on to your face, raising your hands clear above the surface, so as to keep your heels up, but depressing your head.

When you have got well practised in this second stage, you can vary your position in all sorts of ways, such as floating on your back, with arms and legs



THE BACK STROKE. POSITION 2

extended in the form of a St. Andrew's Cross ; with the legs together and arms at right angles to the shoulders ; with either leg drawn up, resting the foot on the inside of the thigh and the reverse arm under the head ; with the arms folded under the head behind ; and on either side.

This last position is, perhaps, the most difficult of all. Float as in the simple position, take in a deep breath without disturbing your balance, and turn over half-way towards the chest float.

The operation is easy enough, being a half-turn to the second float, but the difficulty consists in stopping half-way. The absolutely correct attitude displays only the upper portion of the upper arm, the profile, one side and upper leg, and can only be achieved after long and painstaking practice.

## CHAPTER II

### **Back Swimming**

THE back stroke is generally considered to be the most useful one which a swimmer can learn. I don't patronise it overmuch myself, but then I have my reasons for that, which I will go into later on. Nevertheless, I am perfectly willing to admit that every swimmer should get acquainted with it as speedily as possible, and should turn his attention in that direction as soon as he has mastered the simple tricks of water travelling, resisting firmly all temptations to learn anything about side, over-arm, trudgeon or other strokes (on account of their superior



THE BACK STROKE. POSITION 3

speed) until he has learnt all there is to know about swimming on his back.

If there were no other reason for paying attention to back swimming, the simple fact that it is practically the first essential to all life-saving work should alone serve to recommend it.

For in all instances where the drowning person is either insensible or struggling, it becomes necessary to turn him on his back, and holding him either with your hands on each side of his face, or above the elbows or under the armpits, to swim yourself to shore on your back, thus rendering a thorough acquaintance with back stroke indispensable for every swimmer.

In addition to this, it is generally considered to be the least fatiguing of all strokes, and no doubt the average man can keep afloat longer in this style than in any other.

It isn't a difficult stroke to learn, either, being almost identical to the breast stroke, with the body in a reversed position, all that is needed being to acquire the necessary confidence in a scientific fact with which you have already become acquainted, namely, that your body weighs less than the water in which it is immersed; and as during your first attempts you will often find your head ducking under every time you bring your hands above your head, this confidence is apt to be somewhat shattered.

But perseverance will soon get you into the trick, if you have made up your mind to master it, when you will be surprised at the difficulties which you encountered at first.

Various methods have been suggested for the early



practice of novices, such as holding on to the rail of a bath with both hands, etc., but, best of all, I would suggest the turning quietly over from the breast stroke.

This is fairly easy, far more natural, and does not occasion any great risk of splashing about and consequent nervousness. While swimming on the breast, throw one arm up in the air and press the other straight down in the water, which proceeding will turn you right over on to your back, when you can proceed with the stroke as described in the first instance.

Keep your body as straight as possible when using this stroke, the head lying well back, with the ears under water. The arms go back from the sides above the surface, and join at full stretch above the head, then sweeping outwards and downwards to the sides. The legs are drawn up with the knees as wide apart as possible, as in the breast stroke, at the same time as the hands go up, and kicked out as the arms sweep down. It is a slow method of progression, and is, therefore, as previously stated, frequently scamped, if not neglected altogether in the hurry to get on to side, over-arm, and other faster styles of swimming. But this is a serious mistake, and it is on that account very fortunate that Mr. M. A. Holbein should have made the stroke more fashionable.

The speed at which a swimmer can travel on his back may be accelerated by kicking twice for every arm sweep, and this method should always be cultivated. There is little or no difficulty in so doing, as the arm action takes about twice the time of the leg movement. Rapidity of motion can be

still further increased by striking out with each arm alternately, but this action is not very easy to acquire, nor is it deserving of any really serious study, since if speed be desired this can be obtained much more readily and easily with one or other of the racing strokes.

### CHAPTER III

#### Side and Over-Arm Strokes

HAVING mastered the ground-work of Swimming, or, in other words, having acquired a knowledge of travelling in the water and of maintaining oneself afloat while so doing, the student must next devote his attention to the art of getting through the water at express speed.

He will, naturally, want to know all that he can learn about these methods, as by this time his ambition will naturally have become fired with a desire to win cups and other evidences of his ability in the water, and he can only obtain these by winning races, which, save in specified stroke contests, are the special preserve of the side, over-arm, trudgen, or crawl stroke swimmer.

The first of these strokes for him to get acquainted with is, naturally, the side stroke, since this is but the over-arm carried out with a lesser degree of confidence, standing perfectly in the same relation thereto as the breast does to the back stroke.

In both these methods of swimming, far and away

the most important work is done with the legs, and this leg action is, unfortunately, most difficult to describe either in words or by illustration. In fact, the swimmer can best study either by actual practice by himself, although a few hints here may perhaps assist him in the earlier stages.

The swimmer may select either side to swim upon, left or right according to fancy, or he may change over, if such a proceeding accord with his inclinations; but nearly every swimmer with whom I am acquainted elects for one side only and sticks to that. I myself, for instance, always swim on my right side while J. A. Jarvis swims on his left. We find that we get along better by sticking to the one side, since we don't lose time or "way" in changing, and have accustomed our muscle groups to the action we first fell into, and I greatly question whether we would get along nearly as comfortably if we were to make any alteration.

In swimming with the side stroke the swimmer turns over on the side which suits him best, either on coming up from his dive or by turning over from the breast stroke (which later method might be found more convenient by a beginner), and then proceeds to propel himself through the water in the following fashion.

The arm strokes, which are the least important, in side stroke swimming especially, are made alternately, thus differing from the methods of swimming previously described.

The under arm (in my own case the right, but the left to a man who prefers his left side) shoots out to slightly above the shoulder level, but fully extended, and is brought down almost to the side,

the elbow then being bent, with the wrist turned inwards and is again extended. The upper arm works what is practically a bent-elbow stroke, moving upwards, from resting along the side, until the hand reaches just above the furthest point attained by the under elbow. It should then describe a small sharp downward sweep back to the side, being extended as the under arm comes in, thus preserving a progressive motion.

In making both these arm strokes, the palm should be turned downwards while striking, with the fingers closed and the knuckles bent, so that the hand assumes a cup shape. In returning the arms for each following stroke both of them, together with the hands, should be slid upwards close to the body, so as to impose as little check to the forward motion as possible.

The leg-stroke in side stroke swimming is a very short, quick movement, both lower limbs being kept absolutely straight as far as the knee, the under leg being bent back sufficiently to give a fairly powerful kick, while the upper leg is kicked forward from the knee only, the legs crossing each other like a pair of scissors as each stroke is made.

Until comparatively recent times the legs used to be drawn right up under the body as in breast and back swimming, but when the "Northern," or "Lancashire" kick, as described above, was introduced by E. T. Jones, J. Nuttall, J. H. Tyres, and other Northern swimmers, it was found that quite as much forward motion was obtained, while the "check" action, due to pulling the legs right back, was avoided altogether. There can be no doubt as to the advantages of the modern method,

although many swimmers seem to experience a difficulty in getting the hang of it.

### Over-Arm Swimming

At first sight there would appear to be but little difference between side stroke and over-arm swimming, and what difference there is is by no means easy to describe. Nevertheless, the over-arm action is infinitely the faster of the two, owing to the fact that by bringing the upper arm *above* the surface of the water the resistance of that element and, consequently, the "check" action, is considerably reduced, while there is a greater force obtained by the greater downward sweep of the raised arm, gained without any corresponding retardation. In addition, the forward jump obtained thereby enables one to employ a more vigorous leg kick.

When swinging the arm over, just as it reaches its full stretch, it is bent sharply at the elbow, the forearm being practically all that actually enters the water. The head is frequently almost entirely submerged during a good portion of this stroke, so that it would be advisable for every swimmer to practise the trick of emptying his lungs under water. To attempt to perform the dual feat of inhalation and exhalation during the brief period when the face is free leads to short breathing, and no man can keep up anything like a quick pace on short respirations.

The art of exhaling while under water also comes in fairly useful for the back stroke, as one's head frequently goes under then when the arms are out of the water. It is, of course, quite possible to so time one's breathing that one can inhale deeply

during one rise of the head, partially exhale during the next, and both finish the exhalation with a quick, short inspiration on the third "bob up"; but this is inadvisable, as it makes the breathing very irregular and taxes the respiratory organs pretty severely.

## CHAPTER IV

### **The "Trudgen" and "Crawl" Strokes**

Two more varieties of over-arm swimming are known as the "trudgen" and crawl strokes, and there can be little doubt that one or other of these is destined to be the universally adopted racing stroke of the future. It cannot be said that all the fastest times so far have been made by means of one or other of these, but, nevertheless, it is certain that those swimmers who have abandoned the over-arm for either the "trudgen" or crawl have greatly improved their speed by so doing.

Just at present there would appear to be a tendency to prefer the "Australian Crawl" (as it is called) over the "trudgen" pure and simple, owing to the extraordinary feats put up by Messrs. B. B. Kieran and C. M. Daniels; but while there is no very great difference between the two methods of propulsion, the "crawl" being more or less of an improved "trudgen," it is not impossible that the latter may undergo some other slight variation, and while retaining its name regain the popularity which it appears to be on the point of losing.



THE OVER-ARM STROKE

### The "Trudgen"

When Mr. J. Trudgen startled the swimming world with the extraordinary pace and ease with which he gained a 160 yards handicap, the very laws of nature seemed to be reversed. No one could possibly understand how any swimmer could maintain such a fearfully trying action for so long a period.

It seemed as though its inventor (as he was supposed to be) had performed a purely fluke feat which he would be unable to repeat.

But Trudgen did repeat his feat, and carried off race after race, when it transpired that he had learnt his style from the American Indians, and therefore was merely reviving an old and forgotten style generally used by primitive races.

The stroke was naturally imitated, but for a long time the imitators found it impossible to breathe when using it, as their heads remained under water the whole of the time, whereas Trudgen managed to keep his clear almost right through a race.

Closer acquaintance, however, revealed numerous advantages in the stroke. The alternate over-arm movement naturally doubled the gain made by bringing only one arm over, while the shorter leg kick offered less resistance on the return, and, consequently, did not establish anything like the same amount of check. Nevertheless, for a long time few swimmers were able to train themselves into such condition as would enable them to maintain the "trudgen" over anything but short distances, and were compelled to change backwards and forwards with the over-arm stroke, thereby losing "way." Steady practice, however, lessened this disadvantage, and after a time swimmers found





ANOTHER POSITION OF "THE OVER-ARM"

themselves able to stick to the new stroke even over long-distance courses, although with gradually weakening power.

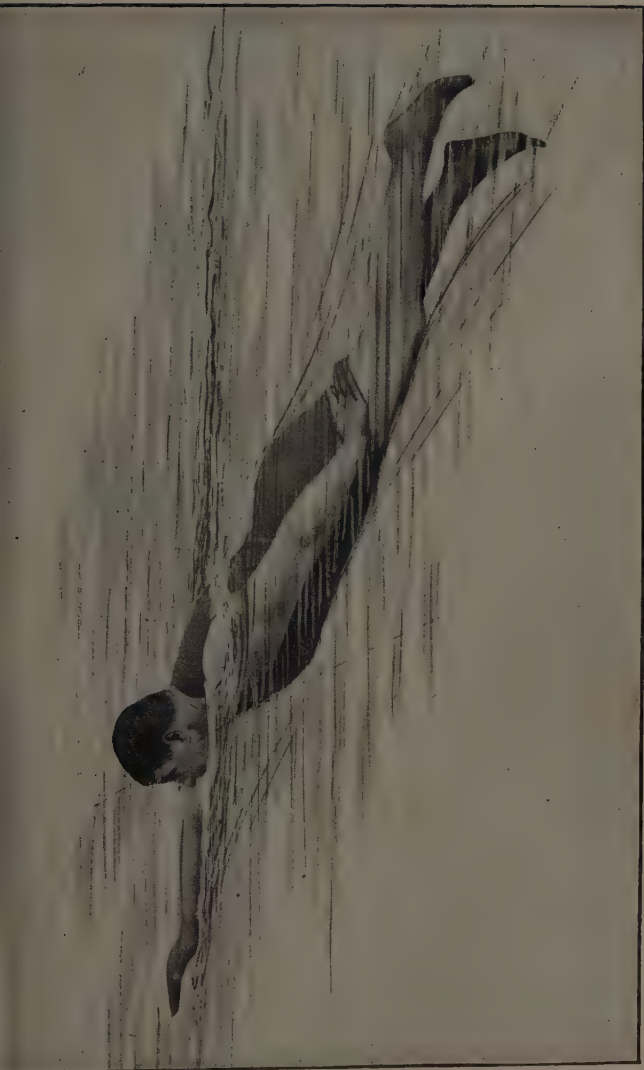
The "trudgen," properly speaking, is a double over-arm stroke, with the body as in the breast stroke style. The head is held clear of the water and the legs as near the surface as possible. The arms come over forward alternately and sweep round in a circle, with the arms turned outwards, the legs are straight to the knees and then kick out "scissor" fashion alternately with the arms—right leg and right arm and *vice versa*. The action is much the same as in the over-arm stroke kick, though slightly shorter.

### **The "Australian" and "American Crawls"**

The "trudgen," in fact, appeared to be the last thing in Swimming, the perfect stroke, so to speak, till we first heard of poor young Bernard Kieran and his astonishing records. He paid his short visits to this country, poor lad, and we were all talking about the new "Australian crawl." Here was another aboriginal stroke, which seemed destined to put the achievements of the "trudgen" quite into the shade.

It was the trudgen, with a difference. The head lower and the face frequently immersed, the body flat, the arm stroke not nearly so long or so sweeping and bent slightly at the elbow instead of straight, the legs almost straight, toes down and kicking straight forward from the knee.

Kieran "rolled" very considerably, and this seemed unavoidable. In fact, his early imitators began to imagine that this rolling movement was



THE "TRUDGEN" STROKE: POSITION I

an advantage; and many authorities still hold to this opinion despite the fact that all previous swimming experience points to the contrary.

The controversy as to the relative merits of the "trudgen" and "crawl" and also as to the merits or demerits of the "roll," which seemed inseparable from the latter and only to be avoided with difficulty in the former, still continues, though of late the "crawl" party, owing chiefly to Mr. C. M. Daniels' achievements, would seem to be establishing their case.

In order to make essay of the "crawl" in its present seemingly triumphant style, they must swim as flat on their breasts as they can manage, with the head low down and dipping under half the time, bring their arms over, bent at the elbows, somewhat in the "trudgen" style, but without so big a sweep. The legs should be absolutely straight, toes pointing straight down and worked alternately and rapidly in short, straight kicks up and down from the knees only. The leg kicks are independent of the arm action altogether, and herein the American style differs from the Australian, wherein the left arm works with right leg and *vice versa* in the same fashion as a dog swims. Every care should be taken to prevent any "rolling," and on this latter point I think that Mr. Daniels and his school are undeniably in the right, despite Bernard Kieran's achievements. Roll cannot fail to act as a check on any swimmer's movements.

The Australians consider that the simultaneous left arm and right leg and right arm and left leg action bring a greater propelling force to bear, despite the consequent "roll," while the American



THE "TRUDGEN" STROKE. POSITION 2

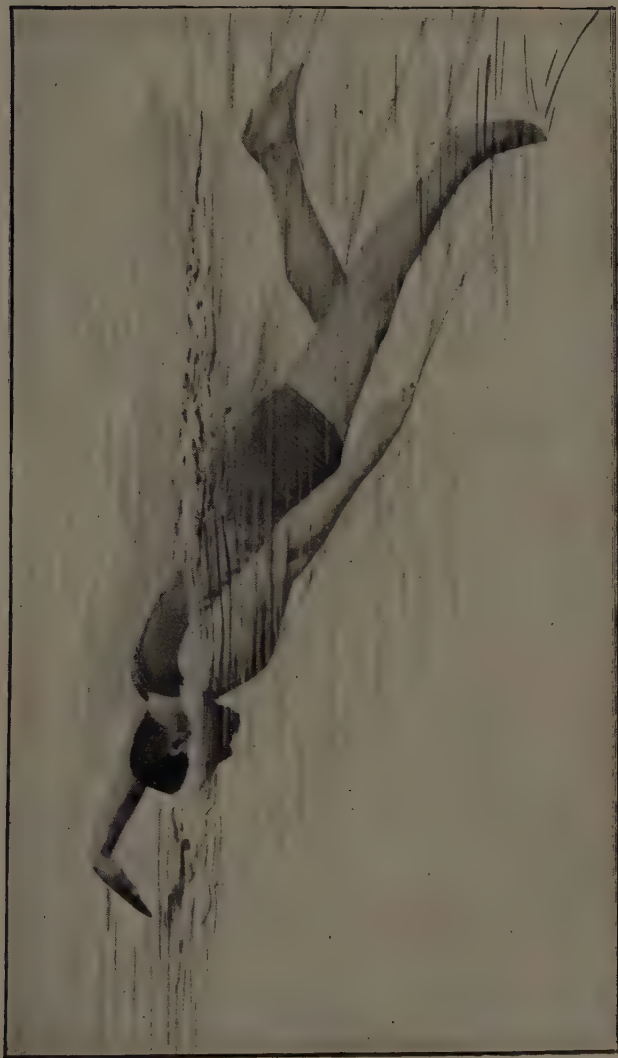
method of working all the limbs independently of each other is held to develop quicker leg action and consequently *continual* propulsion, which minimises the submerging of the body consequent on the over-arm action, and therefore not only suffers less from water resistance but also checks the tendency to roll.

The American arm stroke is shorter, straighter and quicker, but the opportunities for breathing are considerably reduced and are much shorter in duration : a very serious disadvantage especially over anything like a long course. So there you have the arguments on both sides, and can make your trial and consequent selection. Recently a new and fast style combining the best features of both trudgen and crawl has come into use under the name of the "trudgen-crawl," and is becoming increasingly popular.

## CHAPTER V

### Diving

ONE'S early dives are naturally confined to the simplest form, which consists of standing either on the edge of the spring-board or of the bath, etc. In taking off from the edge of a bath the novice will be well advised to stand on a towel or some other dry and rough surface in order to prevent his feet from slipping. He should then clear and fill his lungs by a series of short, quick inhalations and long, slow exhalations, following these with a few



THE "CRAWL" STROKE. POSITION I

deep, slow breaths, while swinging his arms at his sides, until his breathing is perfectly deep and regular. This will steady his nerves and regulate his circulation.

Move slightly forward until the toes project over the edge of your take-off, pose the legs perfectly straight with the feet close together, bend over the body to suit yourself either at right angles as some divers do or at about 45 degrees, the arms to be straight out in front of the shoulders in either case, in line with the inclination of the head, which is enclosed between the upper arms. Take a final deep, long breath and retain this, and with the whole body finally stiffened spring off by pushing clear with the toes. The body should then pass through the air as shown in the illustration, and enter the water at an angle of from 40 to 60 degrees according to the depth of plunge intended. The lesser the angle the deeper the dive, and *vice versa*. The latter will be found the easier, perhaps, but care must be taken not to overdo this and to come down flat in consequence.

The actual depth of the dive can be regulated according to taste and fancy, but in taking off at the start of the race it would be naturally foolish to dive to any depth, as this would only mean loss of time.

On entering the water the backs of the hands should be uppermost and the thumbs should be locked, the feet being bent well back. In order to rise to the surface all that is necessary is to raise the arms slightly upwards on a slant, and up you will shoot. If you are diving in order to start for a race, draw up your legs as your face emerges, so as





THE "CRAWL" STROKE. POSITION 2

to be ready to strike off at once, the arms being already in position.

When you have thoroughly mastered the standing dive you must next carefully practise taking off from a run. Don't go to the spring-board at first, but try from the side of the bath with a few quick steps so regulated that the last one will land you with one foot just half over the edge. This foot should be the one from which you feel that you can best spring into the air, when your body should be straightened rigidly and the water entered as before.

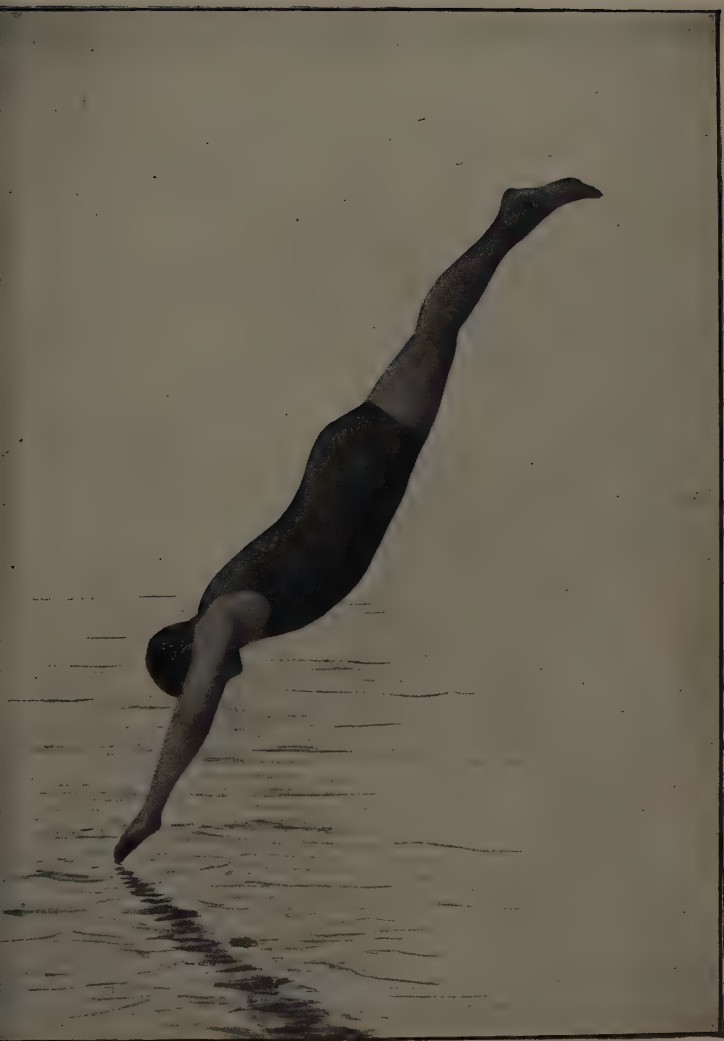
Proceeding next to the spring-board, you will find it advantageous to finish your run a few paces from the end, jump the last stretch and then shoot out. In this case additional momentum can be gained by swinging the arms as shown in the illustration of a racing dive, since you will by now have acquired sufficient proficiency to enable you to straighten your body correctly from almost any position.

Try always to accustom yourself to open your eyes as soon as you enter the water, as you will thus avoid all risks of any collision.

### **Fancy Diving**

You can now practise any variety of deep, high or fancy diving which may take your fancy or appeal to your tastes. The first two branches need no description from me, but a few fancy dives may be worthy of attention.

Artistic or display dives are too numerous for mention, and you can here find an almost inexhaustible field for your talents. I have not devoted



ENTERING THE WATER FROM A HIGH DIVE

very much attention myself to this branch of the art, so will merely confine myself to describing a few very graceful dives at which Miss Annette Kellermann, the famous Australian lady swimmer, is so proficient.

### **The Dolphin Dive**

For the first of these, stand erect on the edge of the spring-board, with the toes projecting and the hands at the sides. Throw your arms up over your head and spring up into the air, twisting right over during your flight through the air, so as to enter the water in a position which is the exact reverse of the starting one.

### **The Australian Splosh**

Stand as before and spring well out, doubling up your body in the air, stooping down and clasping your knees. You should, in fact, endeavour to roll yourself into a ball, thrusting your head well forward and your chin down. Enter the water in this position, viz., sitting down, but be careful to point your feet almost straight downwards.

### **The Neck Dive**

Lie down on your back on the spring-board with your head slightly projecting over the edge. Grip the front edge of the board with your hands and pull your legs and body right over, back somersaulting through the air, into a perfectly straight position and entering the water feet foremost.



FINAL POSITION FOR A RACING DIVE

### **The Back Dive**

Stand on the edge of the board with your back to the water. Throw your hands up and backwards. Push off with your feet, and turning right over in the air enter the water with the hands pointing downwards and the body straight.

### **The Standing-Sitting Dive**

Stand on the front edge of the board, erect and rigid, with your arms close to your sides and the palms extended right and left in order to receive the subsequent impact of the board. Jump straight up into the air and come down in a sitting position with your legs stiff and straight out into the air in front of you, knees stiff, and landing on your outstretched hands. The impact of this, assisted by a push off with the hands, will jerk the diver clear out head foremost into space. He (or she) then comes over as in an ordinary high dive, straightening the body and entering the water with the hands and head foremost.

## **CHAPTER VI**

### **Long Plunging**

THE "long plunge," it may be mentioned, is a valuable asset to a racing swimmer, but it must not be supposed that this should be carried to excess. Naturally, the initial spring through the air and subsequent shoot through the water will carry you further than your first stroke could possibly do,



COMING UP FROM A RACING DIVE WITH LEGS DRAWN UP READY TO STRIKE OUT

but there is of course a limit to this. The impetus of your spring-off weakens rapidly, and a swimmer must be able to gauge accurately the point at which his shoot is slackening in speed, when he must immediately come to the surface and strike out.

Nevertheless, long plunging is well worth practising. It is a delightful and most healthy sport, and physical disabilities offer little or no bar to a very high development of one's powers in this direction.

The "Long Plunge," which forms one of the items of the annual Amateur Championship Competitions, is regulated as follows :

It is a standing dive, head first, from a firm take-off (not from a spring-board). The body must be motionless and face forwards, no run up being allowed. The plunge is terminated (if the competitor has not previously raised his head above the surface) at the expiration of one minute, time being reckoned from the actual take-off. Plungers must leave the water as quickly and with as little disturbance of the surface as possible. The distance covered is reckoned by the point reached by any portion of the plunger's body in a straight line from the diving place.

The whole art of plunging consists in keeping your body absolutely straight and in travelling along a straight line. Leap well out with the body rigid, enter the water at as wide an angle as possible with the arms at full stretch and the hands arranged as a cutwater. Go in quickly with as little splash as possible, as this will check your progress. Don't dive deep, say, two to three feet at most, and rise very gradually. Keep the body absolutely rigid, palms downward, head pressed down, chin on chest, chest





THE "DOLPHIN" DIVE AND THE "AUSTRALIAN SPLOSH"

expanded, legs absolutely stiff and as straight with the body as you can keep them, toes pointing almost straight backward, so as to minimise their "brake" action as much as possible. Fill your lungs right up before starting and hold your breath.

Practise deep breathing exercise and the retention of your breath on every possible occasion, both in and out of the water. Remember that you must be able to hold your breath for 60 seconds if you are going to make a limit plunge. Practise floating on your face also in order to accustom yourself to the rigid position.

Of course you must always plunge with your eyes open and should practise in baths which have lines laid along the bottom that you can follow. If you find yourself deviating from the straight course, swerve your body slightly so as to get straight again, but you must remember that any such steering action will cause you to lose some of your "way." Other items for practice are, I think, sufficiently indicated in the directions given above.

## CHAPTER VII

### Training

As with every other sport, training is a most important item towards success in any branch of Swimming, but the methods to be adopted differ very considerably from those in all other forms of athletics.



THE NECK DIVE

For at Swimming, and at Swimming alone, plenty of flesh is a valuable asset. Athletes in every other pastime devote their main attention to getting rid of all superfluous weight, whereas the swimmer's chief fear is that he will denude himself of too much of his valuable bone-covering.

He needs plenty of good, pliable, supple muscle, and he also needs, above all men, an immense supply of wind and staying power, but he has to take every precaution against depriving himself of buoyancy and warmth while developing these qualities.

Muscle, wind, and stamina are, as everyone is aware, best built up by hard and regular exercise, and by a strict and well regulated diet ; but then this method of training will, at the same time, consume the majority of one's fleshy tissue, which is the very substance that keeps one high in the water, and which also protects the swimmer during his long immersions.

Ladies, for instance, who do not, as a rule possess a superabundance of muscle, and whose bones are, as a rule, much lighter than those of the male sex, while they are also generally endowed with a more liberal allowance of flesh, are indebted to these causes for a much greater buoyancy than falls to the lot of the average man.

Now, I myself have personally been naturally gifted with a fairly liberal covering of flesh, and am also the lucky possessor of a "hide" instead of a skin. By this last I mean that anyone can take hold of a handful of my outside "wrapping" and pull it out, just as the hide of a dog or other animal can be pulled out. This is a very valuable asset, and enables me to withstand a very low



THE BACK DIVE

temperature of water for a much longer period than the average man.

I have, consequently, been extremely careful to avoid minimising either of these advantages, and realising, at a very early stage in my career, the necessity of a form of exercise which would develop my muscles and generally wind me up to the "pink" of perfection, from the point of view of "condition" as required by a swimmer, I devised a system of exercises with a pair of special "grips," which has since become known as the "Jappy" Grip Exerciser.

Regular "Jappy" Grip Exercise, together with a fair amount of walking, comprises the whole of my training, that is, of course, apart from swimming exercise; but, no doubt, short distance and sprint swimmers who (since speed is the chief thing to be desired) must cultivate greater muscular vigour and rapidity of movement, would need a slightly more strenuous method of preparation.

Regular daily walks should also be undertaken, say two miles, and for speed development these should be brisk. Sprinting might also be indulged in now and then.

An occasional hot bath and plenty of massage with a good embrocation, are excellent, since these methods will keep the muscles soft and pliable. The massage should be of the same description as that used by a boxer or runner, that is to say, the muscles and sinews should be stroked, rubbed, punched, slapped, and pulled to prevent their becoming at all hard or stiff.

When entered for a race, the strict training should commence at least twelve weeks beforehand.



THE STANDING-SITTING DIVE

Starting with a short distance, work up gradually to a little over the full course. Don't overstrain yourself in these practice swims, but work your speed up gradually. Some swimmers are very particular about having themselves carefully timed in all their trials, having the time called for each length of the bath, if practising in one. There may be something to say for this, but, to my mind, the practice only tends to worry and confuse a man.

The great idea is to train yourself to swim at the same pace throughout, since sprinting up, as in pedestrianism, is practically out of the question at swimming.

Now, as is well known, I am an adept at maintaining a steady pace and stroke, and scarcely vary two strokes a minute even after swimming eight or ten hours. I got an idea as to the best way of developing this quality during my service in the Glasgow Highlanders and the London Scottish. It seemed to me that if the strains of the band could always brisk up any man, no matter how tired he might be, and could hold him to a regular step and pace, then surely something of the same kind of thing would come in useful to me in the water. For this reason I always have a piper with me when engaged on a long swim—Pipe-Major Nicholl—who understands me and the pace that suits me. He never wearies nor varies unless I want him to do so, and by this means I can keep up my twenty-nine to thirty-two strokes a minute for hour after hour.

But whether one swims to music or no, the strictest attention must be devoted to regularity of stroke, and strength of stroke should also be studied quite as much as speed. As the time of a race draws near



practice should be indulged in twice a day, half the distance being covered in the morning, and the whole course in the evening. Don't overdo this, so as to qualify you for an attack of cramp. Don't despise the services of a trainer, and fancy that because you were able to teach yourself to swim that you must, in consequence, be equally capable of teaching yourself to race.

Diet is by no means so important a feature with swimmers as it is with other athletes. Personally, I have been a lifelong teetotaller, and would advise all swimmers to studiously avoid any excess of intoxicating liquors. Some swimmers do, I know, believe pretty firmly in old ale, port wine, sherry and eggs, etc., but personally, I believe them to be better without it. Spirits certainly should be strictly barred. I must plead guilty to indulgence in an occasional cigarette, but the swimmer would be well advised to do without smoking altogether. It impairs his wind, which is his chief asset.

Then, I eat very little of either meat or vegetables, but this may be a peculiarity of mine. Eggs, fish, milk puddings, chicken, etc., provide me with the majority of my nutriment, and I find myself better suited with this *regimen*, but I would not suggest that it would suit everybody to follow my principles.

Pastry and potatoes are, however, best left alone, and a man who confines himself to honest roast and boiled and plenty of green stuff won't go far wrong, but here again, a good deal will depend on your build and capacity for putting on flesh.

## CHAPTER VIII

**Channel and Long Distance Swimming**

THE possibility of my being able to swim the Channel was first brought home to me purely by accident. I had been swimming about for some time in the bath one evening just for pleasure, and followed this up by winning a long distance race of I forget how many, but I know that there were a good number, lengths. After this I felt like staying in the water, and kept on swimming about until someone suggested a game of water polo.

I joined in this as half-back, and put in a lot of hard swimming, and yet, when I finally came out of the water, did not feel in the least distressed.

Mr. George White, the champion one-armed swimmer, who was among the company present came up to me and said that, in his opinion, judging from the speed and stamina which I seemed to possess, that I ought to stand a very good chance of getting across the Channel.

We talked the idea over, and I must confess that it appealed to me. I subsequently made seven attempts to emulate Captain Webb's achievement, and, although I was time after time denied success I felt confident of triumphantly negotiating the passage before I had finished, and of forcing the "narrow streak" to acknowledge me as its master.

Naturally, I did not go at the business "bald-headed," I wanted to test my powers, and, therefore, went into training by covering the other recognised really long-distance courses.

The first of these was on July 2nd, 1905, when I swam from Blackwall to Gravesend Town Pier in 5 hours 7 min. 29 sec. It did not set up a record for the distance, but the conditions might have been more favourable; and, anyway, I felt more assured of meeting the Channel as far as distance was concerned.

On the 24th of the same month I went down to Dover, and, in company with Miss Annette Kellermann, swam to Ramsgate in 4 hours 28 min.; and in the following month from Margate to Herne Bay and back, covering a full distance of 34 miles in 9 hours and 30 min.

I proposed to make an attempt at the Channel itself that year, but various considerations caused me to postpone the attempt.

So early in 1906 I went down to the South Coast, and set myself seriously to work to get accustomed to the water, its temperature and *feel*, and incidentally to pick up all the knowledge I could about the tides, currents, etc.

Chief of these practice swims was my journey from Brighton to Worthing and back, a distance of 30 miles, excluding the inevitable sea drift along the coast, and I managed to cover the course in 12 hours 16 min. This was on June 23rd, and, after several other swims, I set out to try and beat Captain Webb's feat of swimming from Dover to *inside* Ramsgate Harbour. I had swum to the end of the harbour from Dover twelve months before, in very quick time, during my trial with Miss Kellermann, but recognised that on this occasion I should have to face a much harder task in battling my way into the harbour itself. And so it proved, for while in

1905 I got to outside the harbour in 4 hours 28 min., it took me, in all, 6 hours and 33 min. to fight my way into the harbour. I covered the distance from Dover to Ramsgate in very fast style, but had a tremendous struggle with the currents as I fought to win my way through the entrance.

The battle lasted over 2 hours, and, bar myself, I believe that only one of my companions fancied that I should manage it. This exception was Major Nicholl, who certainly deserves a medal for long-distance piping. He kept "skirling" away, and announced to those with him in the accompanying lugger his fixed determination to "blow" me inside. No one could possibly fail with such determined backing, and I finally entered the harbour more than two hours *inside* Captain Webb's record.

This seemed to settle the matter, and I came back to Dover satisfied that I had it in me to do the Channel in two tides or, at most, three.

### The First Attempt

I certainly ought to have succeeded the first time. I could not have asked for better conditions. For after several disappointments, and any amount of consequent irritation, July 18th, 1906, dawned a perfect day. The sea had been very high, but was going down fast, and when I waded in off the South Foreland, at 11.39 a.m., the sea was described as being like a sheet of glass. The course mapped out by my pilot was designed to set me on the French side of the Varne shoal inside six hours.

With everything so favourable at my very first attempt, and with the admonitions and headshakings with which my proposition to cross in two tides had

been favoured, I naturally laid myself all out to my task. The Varne was passed well inside the alleged impossible time, and in 7 hours I had gone 15 miles, 12 of which were on the direct course. I felt very pleased and elated, and full of strength and vigour, and suppose that I succumbed to my feelings. Anyway, I must have spurted up tremendously, for just after this my left leg gave out. The pain was fearful, and as I rely almost entirely on my left kick every stroke was an agony. I bound the leg up, but it was no use, and collapsed  $3\frac{3}{4}$  miles from France, after swimming only 9 hours 51 min. It was a cruel disappointment, the more cruel as, with the exception of my leg, I was not in the least distressed, and even now I can't help thinking that Fate served me a scurvy trick by making me pay so heavy a penalty for one or two exuberant, but unwise, if natural, kicks of joy.

### **The Second Try**

This was, perhaps, a foolish attempt under the circumstances. The weather and water conditions were all right, and these tempted me; but it was, honestly speaking, not giving my leg a chance. That damaged limb did its best, but had to surrender after 3 hours and 55 min.

My leg was the principal cause of failure on the third attempt, while on the fourth occasion I had the misfortune to be overcome by biliousness.

### **The Fifth and Closest Call to Date**

This was positively wicked luck. To get so near and then to fail, was terribly cruel. I got off all right, and travelled along well and comfortably,

despite the hindrance consequent on my getting mixed up with a shoal of mackerel. Then we got into a fog and lost our bearings. We got straight again, but I had gone out of my course. A bad time or two followed, but I pulled through them all right and felt determined to win. I had zig-zagged a good deal owing to the thick mist, and so had been a long time about it. The two tides chance had gone, but I was certain I could do it in three, when a strong head wind sprang up, and increased in force every minute. I got close in, within three-quarters of a mile, they tell me, and they say also that, from the *Sea Wolf*, they could plainly see the lights in Calais Harbour. My attention was fully taken up with the buffeting I was getting from the waves, which was getting worse every moment. Brickett and the others saw that the attempt was hopeless, but I resolved not to fail "now" if I could help it. Another 45 min. of it and I was found to be nearly 2 miles from shore, the wind and tide beating me out faster than I could fight my way in. It was heartbreaking almost, but there was clearly no use in straining myself to no purpose. A 15 $\frac{1}{4}$  hours' swim against a strong sea and wind, and a sprained wrist, and a close view of Calais all I had to show for it.

On the sixth attempt I was 9 hours 39 minutes in the water, covered 25 miles, and was only four miles from Cape Grisnez when the weather became so bad that it was unsafe for me to attempt to continue.

### **The Seventh Battle**

This was my second nearest try. They brought a gramophone along this time, which I found very useful, but the Channel called in a stiff wind and big waves, and scored again. Early on, my enemy called in a shark as well, which was a bit cowardly, and scarcely in the rules of the game. The monster ally evidently thought so himself, for he rested satisfied after giving me a good thump, which made me painfully sore for several days afterwards. It wasn't a pleasant experience by any means, but preferable to what came along later. I made a fine passage to within 4 miles of Sangatte, despite a pretty severe buffeting, but from there onwards the Channel evidently made up its mind to do its worst. Two miles further in and the sea got right up. My pacers and I had several narrow escapes of being dashed against the small boats, and it became clear that the tide and sea would only carry me out faster than I could work in. Eleven hours and a half,  $22\frac{1}{4}$  miles covered, and  $1\frac{3}{4}$  miles only from my destination. Believe me that I would never have given in had there been the least chance of success. Channel swimming is an expensive business, so I left the Channel reluctantly, in the hope of having my revenge later on.

### **My Channel Swims**

I made over twenty efforts to swim the English Channel, and almost succeeded on several occasions, as the following records will show :—

Sept. 19th, 1908, swam from England to within quarter mile of French shore in 14 hours 55 minutes.

July 21st, 1911, swam from the French coast to within a few yards of English coast in 14 hours 7 minutes.

August 5th, 1907, swam from England to within a mile of the French coast. Time, 15 hours 16 minutes.

### **My Swimming Records which have never been beaten**

Piloted by Capt. G. W. Phillips (Trinity Pilot, Plymouth), swam from Eddystone Lighthouse to Plymouth Pier, a feat never before accomplished. Distance covered, 23 miles. Time, 10 hours 45 minutes 2 seconds. July 1st, 1914.

Swam from Margate to Herne Bay and Back, Distance covered 34 miles, in 9 hours 39 seconds. August, 1905.

Swam from Brighton Palace Pier to Worthing and Back. Distance covered 23 miles. Time, 12 hours 16 minutes. June 23rd, 1906.

Swam from East Southsea Pier to Ryde Pier and Back, May 29th, 1913. Time 6 hours 15 minutes 2 seconds.

On July 6th, 1906, swam from Dover into Ramsgate Harbour, beating Captain Webb's record by over 2 hours.

### **Only Match**

Defeated David Billington, the World's Middle Distance Champion Swimmer, for stakes of £100 a side, from Brighton to Worthing. October 3rd, 1912.



### My Stroke for the Channel

My stroke is another thing, and a rather important one. The "trudgen" and the "crawl" bring one too low down in the water, and are, besides, too fatiguing to my mind. So, considering that one good stroke was worth half-a-dozen indifferent ones, I set about devising a method of propulsion which would carry me along well, keep me the right distance out of the water and at which I could stay. The one I finally fixed on is a sort of a kind of an over-arm, which we will call

### Wolffe's Own

As will be seen in the illustrations, my right or under-arm stroke is a long, bent-elbow "sweep," while the left or over-arm is a very short "scoop," which reaches from just in front of my face to a straight elbow. It comes back quick, and works twice as quickly as the under-arm sweep. The leg action is a short, quick kick from the knee only, to straight leg. I want to swim low down, so as to avoid any danger of sunstroke. All really long-distance swimmers must be careful of this. I invariably swim on my right side, which suits me best, but which has its drawbacks, since I cannot always keep in the shelter of the accompanying boat. I *must* have my face towards it, so that I may recognise signals, directions, etc., and have to run the risk of being washed into it when the current and tide makes that way. The only remedy in this case is to keep ahead.

Many swimmers have to yield to the Channel owing to sickness, but, fortunately, I have trained myself to avoid swallowing sea water, no matter how

it breaks over me ; and, as already stated, I am also remarkably fortunate in being able to defy the cold. I have had over 12 hours' immersion in water as low as 54 degrees in temperature, and have come out as warm as toast—well, nearly—and this, I believe, about constitutes a record. I don't wear any costume, save dark goggles to protect my eyes, but am always well rubbed all over with a special preparation of my own, which is allowed to thoroughly soak in and dry, and is then covered with a coating of lamb's fat.

I am fed about every half-hour, and my food varies a good deal. Sandwiches, of chicken chiefly, biscuits, beef tea, chocolate, chicken broth, weak tea and cocoa form about the principal items. A Channel swimmer has neither the opportunity nor the need for any substantial meals, but he wants nourishing pretty frequently. The constant exertion, the cold and the immersion force it on him. When the sea allows, I swim up right close to the small boat, and have the food handed to me, but in anything like a rough sea, this, of course, is impossible. So I have worked out an arrangement whereby any food can be passed to me in a specially screwed and water-tight vessel at the end of a fishing line, which is attached to an ordinary fishing rod. This minimises the danger of being run down.

## CHAPTER IX

### **Fancy and Trick Swimming**

THIS branch of Swimming is not, perhaps, altogether as devoid of all practical use as may appear.



WOLFFE SWIMMING THE CHANNEL. THE FIRST STROKE

ful practice of every variety of fancy and trick swimming will, like a similar practice of fancy and trick diving, tend chiefly to make swimmers more at home in the water, and thus cannot fail to prove of benefit to them as life-savers, whether the person in danger be the swimmer himself or some other. Too much indulgence in trick swimming is not, I think, calculated to develop either a swimmer's speed or staying power, but these can be developed by other means, and the more attractive forms need not be neglected on that account. For one thing, it certainly serves as an advertisement, attracting and pleasing spectators at any gala, and in some, by no means rare, instances, recruiting the ranks of swimmers in general, by appealing to the histrionic side latent in everyone.

To attempt to fully describe every variety of purely ornamental swimming would demand a book in itself, so I only propose in these pages to describe a few tricks, leaving my readers to study and possibly invent others as they may desire. Observation and practice is within the reach of everyone.

### **The Nautilus Paddle Float**

In this Miss Kellermann is shown lying on her back as in an ordinary float. One leg is thrown up at right angles to the body so as to keep the weight centred and in imitation of the sail of a nautilus. The arms lie along the sides and paddle the body along by wrist play only.

### **Porpoise and Seal Imitations**

These can be best effected either by diving in deep and rising to the surface swiftly, repeating the

movement by diving from the surface and up again in zig-zag or in porpoise fashion, or they can be commenced by standing up in the bath and then bending the body forward as though about to swim on the breast, with the body and legs rigid and the feet close together. The arms should be close to the sides, and the body "sculled" through the water by the hands, working from the wrists alone, in imitation of a seal's flippers. The imitation can be extended, and dives below the surface taken after the seal and porpoise fashion. To execute these, bring the head sharply down to the chest and raise the hands sharply forward and deep into the water. By strong downward and upward strokes past the legs, keeping these latter rigid, the body will appear and disappear like either animal, while by springing as far out of the water as possible and turning the body backwards, forwards and sideways, the resemblance to the porpoise is enhanced.

### **Propeller and Torpedo Action**

Float on the back with arms extended beyond the head. Describe a sharp outward rotary series of twists with the hands from the wrists and the body will drive along feet first. If one hand rotates only, a complete circle can be described. This trick is a fairly easy one, and numerous variations may be introduced, such as the "torpedo," which is started in the same way, only with the heel of one foot placed on the instep of the other and with the hands pushed below the surface, and the hand twist made outwards and upwards. The body will now travel feet first below the surface, the upper foot being alone visible.

### **Turning Over and Over on the Surface**

This is a very effective trick, but requires considerable practice. Float on your back, absolutely rigid with the arms extended beyond the head and the palms close together. Now turn the head slowly to one side. This will cause the body to follow, and if perfect rigidity be maintained and " splash " avoided as much as possible, the body will turn right over on the surface. Once you have thoroughly got into the trick of it, a very respectable speed can be worked up, and in one variation a complete circle may be described, with the feet appearing as the centre and the body and the arms as one of the radii.

### **Somersaults on the Surface**

Swim on your back and then suddenly draw the knees up and bring your head down to meet them. Bring the arms to the sides, and by pushing either downwards into the water or by forcing them up above the surface the body is turned right over backwards or forwards. There are other somersaulting feats open to the trick swimmer, but these had better be learnt under personal supervision.

## **CHAPTER X**

### **Life-Saving**

IF a swimmer entertains a strong ambition to be able to decorate himself with one of the Royal Humane Society's medals—and he cannot display a



A START FROM THE FRENCH SIDE. GREASING THE BODY PREVIOUS TO ENTERING THE WATER, TO PREVENT THE LIMBS CHAFING



JABEZ WOLFFE ABOUT TO MAKE A START TO CROSS THE CHANNEL  
He swam to within a few yards of the English shore on July 21st, 1911 ; time 14 hrs. 7mins. ; and, starting from near Dover, swam to within a few yards of the French shore on Sept. 19th, 1908 ; time 14hrs. 55mins. Distance covered on both occasions (with drift) being about 40 miles.

worthier decoration—he should at once apply to the Royal Life-Saving Society for one of their Illustrated Handbooks of Instruction. Therein he will find a complete system of instruction for rescue work, both in the water and for restoring the apparently drowned. To attempt to give anything like a full description of these methods would be out of place here, and I would not wish to give only a few incomplete details.

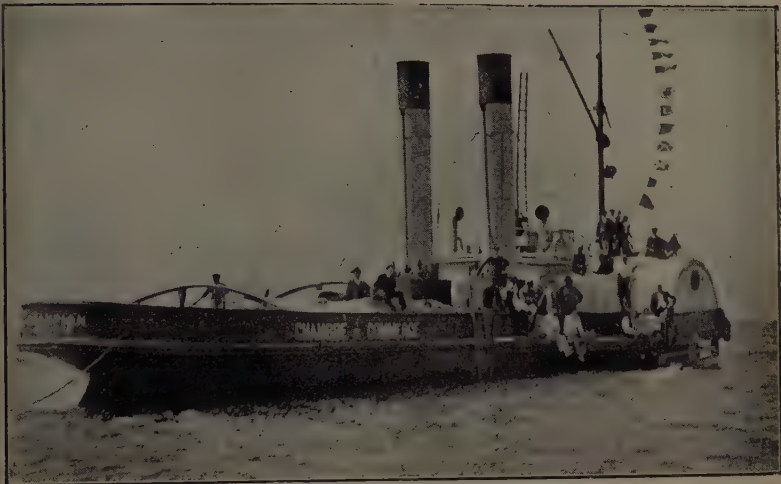
No swimmer should hesitate to learn all that he can about life-saving methods, since he can never say when an opportunity may occur for him to put such knowledge into practice ; and in such an event any failure on his part, owing to ignorance, will be one which he will certainly regret for the remainder of his life.

I am not setting myself up as an Instructor in Life-Saving Methods, but, nevertheless, a few hints may be found immediately useful before complete instruction can be obtained.

The very day on which you read this you may be called to go to some drowning person's rescue, and on this account I would not wish to let slip any opportunity of acquainting a swimmer with the best methods of bringing the unfortunate to shore.

If you find that your quarry is struggling violently and clutching at you wildly, as is often the case, you must beware of being imprisoned and of making one of two victims. Say that he seizes you around the neck, lean well over him, with your left hand in the small of his back and your right over his arm across the shoulder, pinching his nostrils close with your fingers and pushing his head under with the palm of your hand against his chin. This will send





SWIMMING ALONGSIDE THE TUG



ABOUT TO START HIS SWIM FROM THE FAMOUS EDDYSTONE LIGHTHOUSE

TO PLYMOUTH, WHICH HE ACCOMPLISHED ON JULY 1, 1914

Actual distance covered 22 miles. Piloted by Capt. Phillips. Time, 10 hrs. 45 mins. 2 secs., the first and only swimmer to accomplish this great and difficult feat.

him under with his mouth open. He will choke, and so be induced to loose his hold, when you can slip round under him, taking hold of his arms above the elbows and pulling them up level with his shoulders. You will then swim off to shore on your back, using your leg stroke only, and towing him with his head above water and unable to struggle. If the arms are difficult to grasp, slip your hands under his armpits and pull the arms up that way. If you can get them level with his shoulders his struggles will be comparatively feeble.

When your wrists are seized, turn both these simultaneously outwards against his thumbs. Turn sharply, using your elbows against your sides to gain a purchase and he must release you.

If he seizes you round the body and arms, bring your hands up to his chest, resting the left hand on his right shoulder and the right against his chin. Work your right knee up at the same time to the lower part of his chest and push violently backwards, straightening both arms and legs at the same time,

In all these cases take a deep breath first and close your mouth, as you will very possibly go under water in the struggle and must run no risk of choking yourself. This is a most important point to remember.

In all cases where you are dealing with struggling or insensible persons, turn them on their backs and swim yourself with the back leg stroke. You must be on your back yourself, but if they are insensible they can be supported best by holding their heads up between your hands, one resting against each cheek. Be careful to always keep their heads well out of the water.

In my chapter on "Back Swimming," I alluded



WOLFE'S "OWN" STROKE. POSITION I

there to the importance of learning this stroke. That it is an absolute necessity in life-saving should be obvious from the remarks above, and it is, therefore, advisable to lose no time in getting fully acquainted, not only with the ordinary back stroke, but also with the method of swimming on your back when using the leg stroke only, for unless you can do this you will almost certainly make a sad mess of any attempt to rescue a drowning person.

Before going into the water on such an errand, it must not be deemed a waste of time to remove your boots and heavy clothing. Time lost then will be well saved afterwards, both in the speed of your progression and in the greater freedom with which you will be able to deal with the person you have come out to rescue.

When you have gone to the rescue of anyone who retains the use of his senses and is capable of obeying instructions, it is best to get him over on to his back and tell him to lie perfectly still, with his hands on your shoulders near your neck, arms fully stretched and head well back. On this occasion you take the uppermost position and swim with the breast stroke, keeping your chest and head well out of the water, so as to allow him breathing space. Swim with regular, vigorous strokes, and you will be able to convey your burden a very considerable distance.



WOLFFE'S "OWN" STROKE. POSITION 2

## CHAPTER XI

**Water Polo**

EVERY swimmer who wishes to make a name for himself should make a point of playing water polo. It is splendid practice for keeping afloat, for speed and for stamina. It is of course practically impossible to give full description, advice, instruction, etc., concerning a game in which considerable skill is required, in the course of a few pages; but some brief sketch may, I think, prove of interest and value to my readers.

Shortly, then, water polo can be played in any bath (or in the open sea for that matter) provided the rules be observed.

These are, in compressed form, as follows:

The field of play must not exceed 30 yards in length, nor be less than 19 yards, while the width must in no case exceed 20 yards. The goal posts are fixed one foot from the end of the bath or from any obstruction, are 10 ft. wide, with a cross-bar 3 ft. above the surface if the water be 5 ft. or more in depth, or 8 ft. from the bottom if the water be less than 5 ft. deep. The water in no case to be less than 3 ft. A penalty line 4 yards from each goal and a half-way line to be clearly defined at the sides of the bath or by flags.

The ball must be round and fully inflated, and not less than  $26\frac{1}{2}$  ins. not more than  $28\frac{1}{2}$  ins. in circumference and water-proof, without strapped seams.



MISS KELLERMANN DISPLAYING THE NAUTILUS FLOAT AND PORPOISE IMITATION TRICK SWIMS

The game is played between teams of seven players on each side wearing dark blue and white caps respectively, although the goal-keepers must wear red caps. A goal scorer is placed at each end to decide whether a shot has passed through fairly, while all points are decided by a referee, whose duty it is to declare all fouls, disputes, half-time, time, etc. Final decision concerning the goals scored also rests with him.

The game lasts 14 mins., 7 mins. each way, with 3 mins. allowed at half-time for rest and change of ends. Time occupied by disputes or fouls or by the ball going out of play not to be reckoned.

The game is started by the players ranging themselves in a line with their respective goals in the water, and as soon as all is ready the referee throws the ball into the centre, when both sides dash for it. A goal cannot be scored after a start or restart until the ball has been handled (that is, played by the hand below the wrist) either by two members of one team (in which case the scorer must be within half distance of the goal attacked) or by a player on each side.

Fouls consist of any of the following: (1) Touching the ball with both hands at the same time; (2) holding on to a rail or side of the bath at any period during the game; (3) standing on or touching the bottom during play save for the purpose of resting; (4) interfering with or impeding an opponent unless he is holding the ball; (5) holding the ball under water when tackled; (6) jumping off from the bottom or pushing off from the side (except at starting or re-starting) to play the ball or duck an opponent; (7) to hold, pull back or push off from any opponent;



(8) turning on the back to kick at an opponent ; (9) assisting a player to start or re-start ; (10) for the goal-keeper to go more than four yards from his goal-line ; (11) throwing the ball at the goal-keeper from a free throw ; (12) refusing to play the ball when ordered by the referee.

It is a wilful foul to start before the word " Go " ; to waste time deliberately ; to deliberately splash in an opponent's face ; to take up a position within two yards of opponents' goal ; or to commit an ordinary foul wilfully, in the opinion of the referee. The penalty for a wilful foul is to be ordered out of the water until a goal has been scored.

The penalty for any ordinary foul is a free throw to the opposing side from the place where the foul occurred. A goal cannot be scored from a free throw unless the ball has been handled by at least one player other than the thrower. Penalty throws are awarded for a wilful foul within four yards of opponents' goal-line, and the culprit is ordered out of the water until a goal has been scored. This throw can be taken from any point on the four yards' line, and can be scored direct, but may be stopped by any one of the defending side. Goals are scored, goals and corner throws and throw ins (when the ball goes out of play) follow on the same lines as in Association football.

As to the play and the players, the goal-keepers may stand to defend their goals but must not throw beyond the half-way line on penalty of a free throw to the opposition from the half-way line. They must keep within the four yards' line on penalty of conceding a free throw from that mark to the nearest opponent. They are, however, exempt from all

penalties for a breach of 1, 3 or 6 of the ordinary fouls.

The three forwards need to be fast and accurate shots, able to shoot from all sorts of awkward and peculiar positions, and careful to avoid being bored into the sides by an opposing back.

The backs, of which there are two on each side, must be long throwers, able to pass to their forwards without having to swim down to them, as this will leave the opposing forwards unmarked.

The solitary half-back has the hardest position in the field, as he has to swim all over the field and to be constantly at work, assisting his own forwards and getting back to help defend his goal. He must be very fast and also well able to stay the course. The "trudgen" is the best stroke to cultivate for this game, as it is fast, enables a player to see on both sides of him, and enables the player to keep the ball between his arms, sending it along with each stroke, a very secure position in which to avoid being dispossessed.

It is advisable for anyone who thinks of going in for water polo to carefully watch actual games in order that he may become thoroughly conversant with all the fine points of the rules.

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